Alberta Environment

CODE OF PRACTICE FOR LAND TREATMENT OF SOIL CONTAINING HYDROCARBONS

August 2008

made under the Environmental Protection and Enhancement Act

© Published by Alberta Queen's Printer

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ALBERTA ENVIRONMENT

CODE OF PRACTICE FOR LAND TREATMENT OF SOIL CONTAINING HYDROCARBONS (made under the *Environmental Protection and Enhancement Act*, RSA 2000, c.E-12, as amended and *Waste Control Regulation* (AR 192/96) as amended)

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Schedule 1 Registration Information

PART 1: DEFINITIONS

1.1.1 All definitions in the Act and the regulations apply except where expressly defined in this Code of Practice.

1.1.2 In this Code of Practice:

(a) **"Act"** means the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, as amended;

(b) **"barrier"** means a continuous layer of low permeability material, either synthetic or compacted fine-grained soil, constructed as the base of a land cell to restrict downward movement of contaminants;

(c) **"berm"** means an earthen embankment constructed around each land cell;

(d) **"coarse-grained soil"** means soil that has a median grain size greater than seventy-five (75) micrometres, determined in accordance with the *Standard Test Method for Particle-Size Analysis of Soils*, published by the American Society for Testing and Materials, Test Method D422-63, 1998, as amended;

(e) **"cm/s"** means centimetres per second;

(f) **"cultivate"** means till, turn, or mix;

(g) **"down-gradient"** means in the primary lateral direction of groundwater flow;

(h) **"F1", "F2", "F3", or "F4"** means the specific hydrocarbon fraction measured by the analytical methods described in the *Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil - Tier 1 Method*, published by the Canadian Council of Ministers of the Environment, 2001, as amended;

(i) **"fine-grained soil"** means soil that has a median grain size less than or equal to seventy-five (75) micrometres, determined in accordance with the *Standard Test Method for Particle-Size Analysis of Soils*, published by the

American Society for Testing and Materials, Test Method D422-63, 1998, as amended;

(j) **"in situ"** means in the natural or original position or place;

(k) **"ISO 17025"** means the international standard, developed and published by International Organization for Standardization (ISO), specifying the management and technical requirements for laboratories to demonstrate their technical competence to perform defined tests and produce valid data and results;

(l) **"land cell"** means a specific designated portion of a registered site on which the land treatment of SCH is, was or will be carried on;

(m) **"mg/kg"** means milligrams per kilogram;

(n) **"mg/L"** means milligrams per litre,

(o) **"one source"** means a single location from which SCH that is land treated has been generated;

(p) **"registered site"** means the particular land for which a registration has been issued under the Act for the land treatment of SCH;

(q) **"registration holder"** means a person who has been issued a registration under the Act and the regulations;

(r) **"regulations"** means the regulations under the Act;

(s) **"representative groundwater sample"** means a groundwater sample that represents the in situ groundwater;

(t) **"run-off"** means any rainwater or meltwater that drains as surface flow from a land cell;

(u) "**SCH"** means soil containing hydrocarbons;

(v) **"this Code of Practice"** means the *Code of Practice for Land Treatment of Soil Containing Hydrocarbons*, published by the Department, as amended;

(w) **"uppermost formation"** means a continuous, water-saturated, geological stratum including, but not limited to, sand lenses and aquifers, that is projected to be the most probable pathway for the lateral transport of potentially contaminated groundwater;

(x) **"water body"** means a water body as defined in the *Water Act*.

PART 2: GENERAL REQUIREMENTS

Section 2.1: General

2.1.1 Any person who constructs, operates, or reclaims a registered site, must do so in accordance with this Code of Practice, unless the site is the subject of an approval issued under s.6(3) of the Activities Designation Regulation.

2.1.2 Any conflict between the registration application and the terms and conditions of this Code of Practice shall be resolved in favour of this Code of Practice.

2.1.3 The terms and conditions of this Code of Practice do not affect any rights or obligations created under any other authorization issued by Alberta Environment.

2.1.4 The terms and conditions of this Code of Practice are severable. If any term or condition of this Code of Practice or the application of any term or condition is held invalid, the application of such term or condition to other circumstances and to the remainder of this Code of Practice shall not be affected by that invalidity.

2.1.5 If the registration holder monitors for any substances or parameters which are the subject of limits in this Code of Practice more frequently than is required, using procedures authorized in this Code of Practice, then the registration holder shall provide the results of such monitoring as an addendum to the next reports required by this Code of Practice.

Section 2.2: Analytical Requirements

2.2.1 With respect to any sample required pursuant to this Code of Practice, all samples shall be:

(a) collected;

(b) preserved;

(c) stored;

(d) handled; and

(e) analyzed

in accordance with the following:

(i) for water, run-off, and liquid samples:

(A) the *Standard Methods for Examination of Water and Wastewater*, 20th edition, 1998, published by the American Public Health Association, American Water Works Association, and Water Environment Federation, as amended;

(B) the *Methods Manual for Chemical Analysis of Water and Waste*, published by Alberta Environment, 1996, as amended;

(C) for F1, methods 5030B and 8015B, and for F2, methods 3510C or 3520C and 8015B from the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846 manual, published by the United States Environmental Protection Agency, as amended; or

(D) any other equivalent method authorized in writing in advance by the Director; and

(ii) except where otherwise specified in this Code of Practice, for soil and SCH samples, as the case may be:

(A) the *Reference Method for the Canada Wide Standard for Petroleum Hydrocarbons in Soil – Tier I Method*, published by the Canadian Council of Ministers of the Environment, 2001, as amended;

(B) the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846 manual, published by the United States Environmental Protection Agency, as amended;

(C) *Soil Sampling and Methods of Analysis*, 2nd edition Martin R. Carter editor, published by CRC Press, 2008, as amended; or

(D) any other equivalent method authorized in writing in advance by the Director.

2.2.2 The registration holder shall analyse all samples that are required to be obtained by this Code of Practice in a laboratory accredited pursuant to ISO 17025 standard, as amended, for the specific parameter(s) to be analyzed, unless otherwise authorized in writing by the Director.

2.2.3 The registration holder shall comply with the terms and conditions of any written authorization issued by the Director under 2.2.2.

Section 2.3: Classification of Registered Site

2.3.1 A registered site used or to be used for the land treatment of SCH is deemed to be a Class II registered site if the following conditions are met:

(a) the SCH is from one source; and

(b) the maximum period of time the registered site is used to carry on the land treatment of SCH is two (2) consecutive years from the first date on which the SCH was received at the registered site.

2.3.2 A registered site that is not deemed to be a Class II registered site under 2.3.1, is deemed to be a Class I registered site.

PART 3: REGISTRATION APPLICATION/ ADMINISTRATION REQUIREMENTS

Section 3.1: Registration

3.1.1 An application for registration of a site shall contain, at a minimum, the following information:

(a) the information specified in Schedule 1; and

(b) a declaration of whether the site referred to in the application for registration is to be a Class I registered site or a Class II registered site, as specified in 2.3.

3.1.2 Where a registration has been issued respecting a particular registered site, that registration cannot be applied to any other land.

3.1.3 Subject to 3.2.2(a), 5.1.13 and 5.1.14, and in addition to any other reporting required under this Code of Practice, the Act, and the regulations, the registration holder shall inform the Director in writing within three (3) months after any change to the information submitted to the Director in a registration application.

Section 3.2: Written Consent of Registered Owners

3.2.1 No person shall commence or continue land treatment of SCH unless and until written consent of all registered owners of the land on which the registered site is located has been obtained for the conduct of land treatment of SCH at the registered site.

3.2.2 Where a registered landowner of land on which a registered site for land treatment of soil containing hydrocarbons withdraws consent for the operation of land treatment of soil containing hydrocarbons, the registration holder shall:

(a) within seven (7) days of receipt of written withdrawal of consent, provide the Director with a copy of the written withdrawal of consent; and

(b) comply with the written directions of the Director.

PART 4: SITE AND DESIGN REQUIREMENTS

4.1.1 Subject to 4.1.7, no person shall commence or continue land treatment of SCH on a registered site:

(a) where the boundaries of the land cell are within one-hundred (100) metres of the property boundary of land on which a school, hospital, food establishment, or residence is located;

(b) where the boundaries of the land cell are within one-hundred (100) metres of the bed, shore, or bank of a water body unless authorized in writing by the Director;

(c) where the boundaries of the land cell are within any area that permanently or intermittently contains surface water as a result of a man-made structure including, but not limited to, any irrigation canal, drainage ditch, or reservoir, or within one-hundred (100) metres of the bed, shore, or bank of any such area;

(d) where the boundaries of the land cell are within any area specified under the *Wildlife Act* or the *Migratory Birds Convention Act*, 1994, c.22, as a wildlife habitat conservation area, a wildlife sanctuary, or a migratory bird sanctuary;

(e) where any portion of the land cell is located on coarse-grained soil; or

(f) where coarse-grained soil occurs within two metres beneath the ground surface of any portion of the land cell.

4.1.2 Subject to 4.1.7, no person shall commence or continue land treatment of SCH in a land cell on a registered site unless the land cell meets the following minimum requirements:

(a) the land cell is surrounded by berms that:

(i) allow no surface water to flow onto the land cell from areas surrounding the land cell, and

(ii) for a Class II registered site, collect and control all run-off resulting from a one (1) in ten (10) year, 24-hour duration rainfall event;

(b) the land cell is graded to a slope that does not exceed nine (9) percent; and

(c) the maximum depth of cultivation of the soil that occurs in the land cell is a minimum of one metre above the water table.

4.1.3 Berms must be constructed by either:

(a) compacting fine-grained soils; or

(b) placing a synthetic material along the entire interior wall.

4.1.4 Where a barrier is constructed,

(a) there shall be no gap between the barrier and the berm; and

(b) at a Class I registered site, the land cell must be graded to a sump for collection and removal of run-off.

4.1.5 Where a barrier is constructed, the barrier must have a maximum seepage rate equivalent to that of a compacted clay liner that:

(a) is under 0.3 metres head of water;

(b) has a hydraulic conductivity of 1×10^{-7} cm/s; and

(c) has a thickness of:

(i) 0.6 metres for a Class I registered site, measured perpendicular to the barrier and sump surface, or

(ii) 0.3 metres for a Class II registered site, measured perpendicular to the barrier surface.

4.1.6 No person shall commence or continue land treatment of SCH in a land cell on a Class 1 registered site unless that Class 1 registered site has a run-off retention pond that:

(a) collects and retains all run-off removed from the land cell(s);

(b) has the capacity to retain precipitation resulting from a one (1) in twenty-five (25) year, twenty-four (24)-hour duration rainfall event; and

(c) has a maximum seepage rate equivalent to that of a compacted clay liner that:

(i) is under 0.3 metres head of water,

(ii) has a hydraulic conductivity of 1×10^{-7} cm/s, and

(iii) is 0.3 metres in thickness.

4.1.7 Clauses 4.1.1(e), 4.1.1(f), 4.1.2(b), and 4.1.2(c) do not apply to a land cell that contains a barrier.

PART 5: OPERATIONAL REQUIREMENTS

Section 5.1: General Operating Requirements

5.1.1 No person shall commence or continue land treatment of SCH at any location on a registered site except in a land cell.

5.1.2 No person shall land treat SCH at a registered site unless:

(a) representative samples have been collected of

(i) the SCH prior to treatment, and

(ii) the SCH or treated soil already present in the land cell if additional SCH is to be placed on top.

(b) representative samples referred to in (a) have been analyzed for:

(i) F1,

(ii) F2,

(iii) F3, and

(iv) F4;

(c) results of the analyses required under (b) have been recorded, and

(d) the total concentration of F1, F2, F3, and F4 does not exceed three (3) percent by dry weight, as indicated by the results of the analyses of each representative sample.

5.1.3 In addition to any other requirements in the Act or the regulations, and notwithstanding any other provision in this Code of Practice, the registration holder shall temporarily store SCH in a land cell prior to land treatment on a registered site only where the following conditions are met:

(a) stored SCH will be treated in a land cell on that registered site; and

(b) the total concentration of petroleum hydrocarbons in the SCH to be stored in the land cell does not exceed three (3) percent by dry weight.

5.1.4 No person shall apply SCH in a land cell on a registered site if any of the following conditions are present:

(a) the thickness of the layer of SCH in the land cell after application of SCH exceeds the depth that can be cultivated where:

(i) the treatment process requires cultivation of SCH, and

(ii) no barrier is used;

(b) the thickness of the layer of SCH that will be in the land cell after application of SCH would be greater than twenty (20) centimetres where:

(i) the treatment process requires cultivation of SCH, and

(ii) a barrier is used;

(c) the SCH that will be applied to the land cell would be placed on top of SCH that does not meet all the parameter concentration limits specified for soil remediation in the *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, as amended, for the applicable use of the registered site after it is reclaimed, as determined by testing in accordance with 6.1.1.

5.1.5 No person shall commence or continue land treatment of SCH on a registered site unless:

(a) access to the registered site is restricted to persons authorized by the registration holder;

(b) signage is posted around the boundaries on each side of the registered site:

(i) stating that land treatment of SCH is being carried on, and

(ii) providing a contact telephone number; and

(c) subject to 5.1.6, where the treatment process requires cultivation of SCH, at least once every four (4) weeks:

(i) where no barrier is used, the full thickness of the SCH that has been applied to the land cell is cultivated, or

(ii) where a barrier is used, at least seventy-five (75) percent of the full thickness of the SCH that has been applied over the barrier is cultivated.

5.1.6 Where the SCH or the receiving soil in the land cell is saturated with water, covered with ice or snow, or is frozen, a person carrying on land treatment of SCH on a registered site is not required to cultivate the SCH as specified in 5.1.5(c).

5.1.7 Run-off on a Class I registered site shall be removed from the land cell to the run-off retention pond.

5.1.8 No person shall permit the release of any run-off from:

(a) a Class II registered site; or

(b) a run-off retention pond, referred to in 4.1.6, of a Class I registered site,

unless the run-off:

(i) has been tested prior to the release, and is released into a wastewater system of a municipality where:

(A) the wastewater system has been issued an approval or registration under *the Act*, and

(B) the municipality has consented in writing to the release of run-off into its wastewater system; or

(ii) is released to the environment where the quality of the run-off that is released meets all of the limits specified in Table 5-1, as determined from a sample analyzed for all of the parameters specified in Table 5-1, or

(iii) is disposed of at a facility authorized under *the Act* or the *Oil and Gas Conservation Act* for the disposal of that type of waste.

5.1.9 The registration holder shall record results of the analyses required under 5.1.8.

Table 5-1: Quality Limits for Release of Run-off

Parameter	Limit
Total Suspended Solids	25 mg/L maximum
Chemical Oxygen Demand	50 mg/L maximum
Oil and Grease	No visible sheen
PH	6.0 to 9.5 units

5.1.10 Upon request of the Director or an inspector, the registration holder shall:

(a) obtain samples of run-off and liquids;

(b) conduct analyses as requested by the Director or inspector;

(c) record results of analyses; and

(d) provide results of analyses conducted on samples to the Director or inspector.

5.1.11 Subject to 5.1.12, no person shall remove soil or SCH from a registered site unless:

(a) samples have been collected of the soil and SCH that will be removed from the registered site in accordance with the sampling requirements specified in Table 5-2 or Table 5-4, as the case may be;

(b) the samples referred to in (a) have each been analyzed for:

(i) Benzene,

(ii) Toluene,

(iii) Ethylbenzene,

(iv) Xylenes,

(v) F1,

(vi) F2,

(vii) F3,

(viii) F4, and

(ix) Lead;

(c) results of analyses referred to in (b) have been recorded;

(d) the analytical results of the analyses in (b) comply with each parameter concentration limit specified for soil remediation the *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, as amended, for the applicable soil type, and land use of the receiving land; and

(e) the following information regarding the receiving land has been recorded:

(i) legal land description, and

(ii) land use zoning.

5.1.12 Clause 5.1.11 does not apply to the removal of soil or SCH from the registered site to:

(a) a registered site declared to be Class I, that is the subject of a registration under the Act;

(b) a site or facility that is approved under *the Act* or the *Oil and Gas Conservation Act* for the land treatment of SCH; or

(c) a landfill approved or registered under *the Act* where the landfill operator accepts the soil or SCH into the landfill.

Table 5-2: Soil Monitoring at a Class II Registered Site

Location - Sampling Zone Determination	Type and Number of Samples in Each Sampling Zone	Frequency	Parameter
For each hectare, or portion thereof, upon which SCH will or has been applied, divide the area into 6 equal-sized square sampling zones.	Where a barrier is not used, a minimum of one sample from the following depths: • the depth of treated SCH, and • the underlying soil from immediately under the treated SCH to a depth of 15 cm	1. Subject to 5.1.12, prior to removal of soil and SCH; and 2. Prior to closure of the registered site	• benzene, toluene, ethylbenzene, xylenes and lead • F1, F2, F3, and F4

	Where a barrier is used and the barrier consists of fine-grained soil, a minimum of one sample from the following depths: • the depth of treated SCH, and • the barrier from immediately under the treated SCH to a depth of 15 cm		
	Where a barrier is used and the barrier consists of a material other than a fine-grained soil, a minimum of one sample from the following depths: • the depth of treated SCH, and • the underlying soil from immediately under the treated SCH to the barrier, or to a depth of 15 cm if the barrier has been perforated		

5.1.13 No person shall continue to operate a registered site for which the registration application in 3.1.1 contained a declaration that the site was to be a Class II registered site unless the registered site complies with 2.3.1.

5.1.14 No person shall continue to operate a registered site:

(a) for which the registration application in 3.1.1 contained a declaration that the site was to be a Class II registered site; and

(b) that no longer complies with 2.3.1;

unless information has been submitted by the registration holder to the Director including at a minimum:

(c) a declaration that the site is a Class I registered site; and

(d) an acknowledgement that the registration holder is bound by all Class I requirements within this Code of Practice.

Section 5.2: Monitoring Requirements for a Class I Registered Site

5.2.1 A registration holder for a Class I registered site shall monitor the:

(a) soil; and

(b) groundwater

in accordance with this Code of Practice.

5.2.2 All groundwater monitoring wells shall be

(a) protected from damage; and

(b) locked, except when being sampled,

unless otherwise authorized in writing by the Director.

5.2.3 If a groundwater sample cannot be collected because the monitoring well is damaged or is no longer capable of producing a representative groundwater sample:

(a) the groundwater monitoring well shall be cleaned, repaired, or replaced; and

(b) a representative groundwater sample shall be collected prior to the next scheduled sampling date unless otherwise authorized in writing by the Director.

5.2.4 Groundwater samples from a registered site shall be:

(a) collected; and

(b) analyzed

in accordance with Table 5-3.

Table 5-3: Groundwater Monitoring at a Class I Registered Site

Sample Type and Number	Frequency	Parameter
One representative groundwater sample from each groundwater monitoring well	1. Before commencement of land treatment; and 2. Annually; and 3. Prior to closure of the registered site	• benzene, toluene, ethylbenzene, and xylenes • F1and F2

5.2.5 The results of the analyses required in 5.2.4 shall be recorded.

5.2.6 At the time of collection of each groundwater sample referred to in 5.2.4, the static water level in the water well shall be:

(a) measured; and

(b) recorded

prior to collecting a sample.

5.2.7 If the results of the analyses in 5.2.4 show the concentration of one or more of F1, F2, benzene, toluene, ethylbenzene, or xylenes exceeded the respective laboratory detection limits, then the registration holder must immediately report the results to the Director in accordance with the procedures set out in 7.1.1.

5.2.8 Soil samples from a registered site must be:

(a) collected; and

(b) analyzed

in accordance with Table 5-4.

5.2.9 The results of the analyses required in 5.2.8 shall be recorded.

Table 5-4: Soil Monitoring at a Class I Registered Site

Location – Sampling Zone Determination	Type and Number of Samples in Each Sampling Zone	Frequency	Parameter
For each hectare, or portion thereof, upon which SCH will or has been applied, divide the area into 9 equal-sized square sampling zones.	Where a barrier is not used, a minimum of one sample from the following depths: • the depth of treated SCH; and • the underlying soil from immediately under the treated SCH to a depth of 15 cm	1. Before commence-ment of land treatment; 2. Subject to 5.1.12, prior to removal of soil and SCH; and 3. Prior to closure of the registered site	• benzene, toluene, ethylbenzene, xylenes, and lead • F1, F2, F3, F4
	Where a barrier is used and the barrier consists of fine-grained soil, a minimum of one sample from the following depths: • the depth of treated SCH; and • the barrier from immediately under the treated SCH to a depth of 15 cm	1. Subject to 5.1.12, prior to removal of soil and SCH; and 2. Prior to closure of the registered site	

Location – Sampling Zone Determination	Type and Number of Samples in Each Sampling Zone	Frequency	Parameter
	Where a barrier is used and the barrier consists of a material other than a fine-grained soil, a minimum of one sample from the following depths: • the depth of treated SCH, and; • the underlying soil from immediately under the treated SCH to the barrier or to a depth of 15 cm if the barrier has been perforated	1. Subject to 5.1.12, prior to removal of soil and SCH; and 2. Prior to closure of the registered site	

PART 6: DECOMMISSIONING AND CLOSURE REQUIREMENTS

6.1.1 No person shall commence closure of a registered site unless:

(a) the samples of:

(i) SCH; and

(ii) soil

have been collected from each registered site in accordance with the sampling requirements specified in Table 5-2 or Table 5-4, as the case may be;

(b) the samples referred to in (a) have been analyzed for:

(i) Benzene,

(ii) Toluene,

(iii) Ethylbenzene,

(iv) Xylenes,

(v) F1,

(vi) F2,

(vii) F3,

(viii) F4, and

(ix) Lead;

(c) the analytical results of the analyses in (b) comply with the maximum soil remediation concentrations specified for each parameter in the *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, as amended, for the applicable intended land use category of the registered site after closure; and

(d) the results of analyses required in (b) have been recorded.

6.1.2 Closure of the registered site shall include, but is not limited to:

(a) removing all ponds, berms, and barriers that were constructed for the operation of the registered site; and

(b) recontouring the land surface to blend in with the adjacent land.

6.1.3 In addition to the requirements specified in 6.1.1, closure of a Class II registered site must be completed within three (3) years from the first date on which the SCH was received at the registered site.

6.1.4 A registration holder shall notify the Director in writing within thirty (30) calendar days after the date on which closure of a registered site was completed.

6.1.5 The notification to the Director under 6.1.4 shall include:

(a) for a Class I registered site,

(i) an interpretation of the results of the analyses, as specified in 6.1.1, and

(ii) an interpretation of the monitoring results referred to in 5.2.1, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.8, and 5.2.9;

(b) for a Class II registered site, an interpretation of the results of the analyses as specified in 6.1.1.

(c) a completed Record of Site Condition.

PART 7: REPORTING REQUIREMENTS

Section 7.1: Contravention Reporting

7.1.1 In addition to any other reporting required pursuant to this Code of Practice, the Act, or the regulations, the registration holder shall immediately report to the Director any contravention of this Code of Practice either:

(a) by telephone at (780) 422-4505; or

(b) by a method:

(i) in compliance with the release reporting provisions in the Act and the regulations, or

(ii) authorized in writing by the Director.

7.1.2 In addition to the immediate report in 7.1.1, the registration holder shall provide a report to the Director:

(a) in writing; or

(b) by a method:

(i) in compliance with the release reporting provisions in the Act and the regulations, or

(ii) authorized in writing by the Director

within seven (7) calendar days of the discovery of the contravention, or within another time period specified in writing by the Director.

7.1.3 The report required under 7.1.2 shall contain, at a minimum, the following information:

(a) a description of the contravention;

(b) the date of the contravention;

(c) the duration of the contravention;

(d) the legal land description of the location of the contravention;

(e) an explanation as to why the contravention occurred;

(f) the name of the registered owner or owners of the land on which the contravention occurred;

(g) a summary of all preventive measures and actions that were taken prior to the contravention;

(h) a summary of all measures and actions that were taken to mitigate any effects of the contravention;

(i) a summary of all measures that will be taken to address the remaining effects and potential effects related to the contravention;

(j) the number of the registration issued under the Act for the land treatment registered site, and the name of the person who held the registration at the time the contravention occurred;

(k) the name, address, phone number, and responsibilities of all persons constructing, operating, or reclaiming the registered site at the time the contravention occurred;

(l) the name, address, phone number, and responsibilities of all persons who had charge, management, or control of the registered site at the time the contravention occurred;

(m) a summary of proposed measures that will prevent future contraventions, including a schedule of implementation for these measures;

(n) any information that was maintained or recorded under this Code of Practice, as a result of the incident; and

(o) any other information required by the Director in writing.

PART 8: RECORD KEEPING REQUIREMENTS

8.1.1 The registration holder shall:

(a) record the following information; and

(b) keep the following records available for five (5) years from the date of the completion of closure of the registered site:

(i) all records that are required under this Code of Practice,

(ii) the results of any monitoring and analysis that are carried on, and information that is recorded, pursuant to 5.1.2, 5.1.8, 5.1.9, 5.1.10, 5.1.11, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.8, 5.2.9, 6.1.1, and 6.1.5,

(iii) for each source of SCH:

(A) the name of the person supplying the SCH;

(B) the source of the SCH, including but not limited to, a legal land description and any available municipal address of the parcel of land from which the SCH was taken; and

(C) the quantity of SCH received from the source referred to in clause (B); and

(D) the date of arrival of the SCH on the registered site,

(iv) a description of all maintenance and repairs made to the registered site,

(v) all applications submitted to Alberta Environment for a registration,

(vi) all engineering drawings and specifications for the registered site, including but not limited to the design specifications,

(vii) construction documents,

(viii) record drawings,

(ix) all reports of inspections conducted by Alberta Environment,

(x) all registrations issued under the Act for the registered site, and

(xi) all correspondence sent to Alberta Environment.

8.1.2 The results and records in 8.1.1(b)(ii) shall contain, at a minimum, all of the following information:

(a) the date, place and time of monitoring, and the name of the person collecting the sample;

(b) identification of the sample type;

(c) date of analysis;

(d) laboratory name and person responsible for performing analysis;

(e) the analytical method used; and

(f) the results of the analysis.

8.1.3 The registration holder shall immediately provide any records, reports, or data required to be created under this Code of Practice to the Director or an inspector, upon request.

PART 9: CODE OF PRACTICE ADMINISTRATION

9.1.1 This Code of Practice will be reviewed as changes in technological and other standards warrant.

SCHEDULE 1

REGISTRATION INFORMATION

Pursuant to 3.1.1(a) of this Code of Practice, all of the following information shall be provided to the Director:

(a) The name of the applicant, and their address, phone number, facsimile number, and e-mail address;

(b) The company name, if any, and the name, job title, address, phone number, facsimile number, e-mail address, and signature of the person who submitted the registration application on behalf of the applicant;

(c) If a person other than the applicant submitted the registration application, written authorization from the applicant, stating that the person who submitted the registration application was authorized to do so on behalf of the applicant;

(d) The name, job title, address, phone number, facsimile number, and e-mail address of the person designated by the applicant as the primary contact for the registered site;

(e) The municipal address, if one exists, and legal land description (LLD), including the quarter section(s) of the land and the zoning classification on which the registered site is or will be located;

(f) The names, addresses and phone numbers of the current registered owner or owners of the parcel or parcels on which the land treatment of SCH would be carried out, and the written consent of the owner or owners;

(g) The names, addresses, and phone numbers of the current occupant or occupants or lessees of the parcel or parcels on which the land treatment of SCH would be carried out;

(h) A brief description of the SCH treatment method; and

(i) A scale drawing that shows the location of:

(i) the site,

(ii) the boundaries of the parcel or parcels of land on which the land treatment of SCH would be carried out,

(iii) any existing and proposed access road(s),

(iv) any existing and proposed structures or equipment,

(v) adjacent land use, and

(vi) any surface water bodies within five hundred (500) metres of the site.

In consideration of the information required above, the Director waives the requirements of subsection 3(1)(a) through (q) of the *Approvals and Registration Procedure Regulation*, A.R. 113/93, as amended from time to time, for a registration application under this Code of Practice.